

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002953**Date Inspected:** 15-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Skin plates**Summary of Items Observed:**

The name of ABF Certified Welding Inspector (CWI) are Mr. Wang Cheng Jun, Mr. Wei Jian Bo, Miss. Xie Yan and Mr. Yang Yi Heng.

Fit-up and Shield Metal Arc Welding (SMAW) tack welding on splice weld of skin plate (Tower Bay#1 and Bay#2): Caltrans QAI observed ZPMC welders in process of fit up on skin plate numbered P223B to P4 to P401 with 60mm wall thickness (Bay #1) and, skin plate numbered P591 to P600 to P838 to P853 with 60mm and 90mm wall thickness (Bay #2) all of skin plates have been connected and secured with the clamps after fit up process was completed and inspected by ZPMC QC inspector and ABF CWI inspector. Numerous 150mm length SMAW tack welds are evenly spaced around the skin plates bevel by approved welder. The parameters used for the SMAW tacks welding of the skins were conducted in accordance with Caltrans approved WPS. Based on Caltrans QAI observations, no discrepancies were noted

Submerged Arc Welding (SAW) process on skin plate (Tower Bay#1 and Bay#2): Caltrans QAI observed ZPMC welding operators performed semi-automatic SAW on the splice weld of ASTM 709 345 skin plate P210 to P197 to P212 to P71 to P76 to P70 with 60mm to 90mm wall thickness, weld# SSD1-SA179D/E-26B, SSD1-SA179D/E-27B, SSD1-SA179D/E-29B, SSD1-SA179D/E-1B, SSD1-SA179D/E-4B, SSD1-SA179E/E-6, SSD1-SA179E/E-10, SSD1-SA179E/E-16 SSD1-SA179E/E-17 (Bay#1). skin plate P203 to P127 to P78 to P83 to P79 with 60mm to 90mm wall thickness, weld# SSD1-SA180B/E-21, SSD1-SA180B/E-16A, SSD1-SA180B/E-5, SSD1-SA180B/E-15A, SSD1-SA180B/E-19, SSD1-SA180B/E-4A, SSD1-SA180B/E-17A (Bay#1). skin plate P1401 to SA294 to P1292 to P1290 with 45mm to 60mm wall thickness, weld# ESD1-SA294F/G-16B, ESD1-SA294F/G-157B, ESD1-SA294G/G-56, ESD1-SA294G/G-57B (Bay#2). skin plate P1405 to P40 to P75 to P1291 with 45mm to 60mm wall thickness, weld# ESD1-SA294G/G-8B, ESD1-SA294G/G-54, ESD1-SA294F/G-58B, ESD1-SA294F/G-156(Bay#2). The weld designed is a double -V-groove with welding

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conducted in the in flat position (1G) with proper 4.8mm diameter wire feed electrode JW3 and flux/J1-B, made by China Company and completed with approximate five pass. The parameters used for SAW welding of splice weld was conducted in accordance with Caltrans approved WPS-B-T-2221-B-U3. The semi-automatic SAW was monitored and recorded by ZPMC QC and ABF Certified Welding Inspector (CWI). Based on Caltrans QAI observations, no discrepancies were noted.

Summary of Conversations:

As Note within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Wahbeh Mazen (818)292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer
